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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,356	03/09/2001	Piu Bill Wong	47586-P066US-10102050	4203

29053 7590 03/29/2004

DALLAS OFFICE OF FULBRIGHT & JAWORSKI L.L.P.  
2200 ROSS AVENUE  
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DALLAS, TX 75201-2784

EXAMINER

CORSARO, NICK

ART UNIT	PAPER NUMBER
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2684

9

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/803,356

Applicant(s)

WONG ET AL.

Examiner

Nick Corsaro

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-9,11-13,19-23,25-28 and 30-41 is/are rejected.
- 7) ☒ Claim(s) 4,5,10,14-18,24 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,2, 6-8, 11-13, 19-21, 25-27, 30-34, and 36-39, are rejected under 35 U.S.C. 103(a) as being unpatentable over Eswara et al. (6,597,927) in view of Tanaka et al. (6,347,220).

Consider claims 1, 19, and 36, Eswara discloses a system (see abstract lines 1-10).

Eswara discloses traffic beam forming circuitry operable to provide a plurality of traffic beams from a same signal, common use beam forming circuitry operable to provide a common use beam formed from said signal; and beam analysis circuitry coupled to said traffic beam forming circuitry and said common use beam forming circuitry where said beam selection circuitry operates to select each traffic beam of said traffic beams with respect to said common use beam (see col. 3 lines 52-67, and col. 4 lines 1-67 and col. 5 lines 1-55).

Eswara discloses selecting the beam base on the common use beam however does not specifically disclose analyzing. Tanaka teaches analyzing (see col. 7 lines 60-67, and col. 8 lines 1-60).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the invention of Eswara, and have analyzing circuitry for analyzing the beam, as taught by Tanaka, thus allowing an efficient selection of channels, as discussed by Tanaka, (col. 4 lines 47-56).

Consider claim 2, Eswara does not specifically disclose a pilot signal. Tanaka teaches a pilot signal (see col. 7 lines 60-67, and col. 8 lines 1-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Eswara, and have a pilot signal, as taught by Tanaka, thus allowing an efficient selection of channels, as discussed by Tanaka, (col. 4 lines 47-56).

Consider claims 6-8, 25-27, 30, Eswara discloses selecting a beam wherein the beam selected is of best beam. Eswara does not specifically disclose the evaluation is based on beam width or gain. Tanaka teaches beam width and gain (see col. 7 lines 60-67, and col. 8 lines 1-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Eswara, and have evaluation based on beam width and gain, as taught by Tanaka, thus allowing an efficient selection of channels, as discussed by Tanaka, (col. 4 lines 47-56).

Consider claims 11-13, 31-34, 37-39, Eswara discloses selecting a beam wherein the beam selected is of best beam and using an umbrella beam. Eswara does not specifically disclose the emulation. Tanaka teaches emulation (see col. 7 lines 60-67, and col. 8 lines 1-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Eswara, and have emulation, as taught by Tanaka, thus allowing an efficient selection of channels, as discussed by Tanaka, (col. 4 lines 47-56).

Consider claim 20, Eswara discloses a particular subscriber unit (see col. 3 lines 52-67, and col. 4 lines 1-67 and col. 5 lines 1-55).

Consider claims 21, Eswara does not specifically disclose using a pilot. Tanaka teaches a pilot (see col. 7 lines 60-67, and col. 8 lines 1-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Eswara, and use the pilot, as taught by Tanaka, thus allowing an efficient selection of channels, as discussed by Tanaka, (col. 4 lines 47-56).

3. Claims 3, 9, 23, 28, 35, and 40-43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eswara in view of Tanaka as applied to claim 1 above, and further in view of Wang et al. (6,404,803).

Consider claim 3, 22, 23, Eswara in view of Tanaka discloses analyzing the signal, however Eswara and Tanaka do not specifically disclose using integrators. Official notice is taken that the user of integrators to evaluate signals is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Eswara and Tanaka, and use integrators to evaluate the signal, thus allowing the analyzer to develop a useable value based on the analysis.

Consider claims 9, 28, 35, 40-43, Eswara and Tanaka discloses selecting a beam wherein the beam selected is of best beam and using an umbrella beam. Eswara and Tanaka do not specifically disclose the spatial processing. Wang teaches spatial processing (see col. 4 lines 12-67 and col. 12 lines 55-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Eswara and Tanaka, and have spatial processing, as taught by Wang, thus allowing an efficient selection of channels.

*Allowable Subject Matter*

4. Claims 4-5, 10, 14, 15, 16, 17, 18, 24, 29, objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(6,314,305), Solondz teaches beam forming.

6. Any inquiry concerning this communication should be directed to Nick Corsaro at telephone number (703) 306-5616.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung, can be reached at (703) 308-7745. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth, Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 customer Service Office whose telephone number is (703) 306-0377.

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Nick Corsaro

**NICK CORSARO**  
**PATENT EXAMINER**

*Pomeroy*